

de Sitter Days Program

Dates: Thurs-Sat, 13-15 November 2003, Fermilab

All talks will be located in Wilson Hall, Curia II (This is on the second floor in the South-West Corner.)

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November 13

Thursday Morning

Chair: P. Greene

Theme: Mostly Branes, Strings, and de Sitter Space-Time

Time	Speaker	Title
09:00 am	Patrick B. Greene	Welcome
09:10 am	Andrei Linde (Stanford)	Towards Inflation in String Theory
09:50 am	Jerome Martin (Inst. d'Astro. Paris, CNRS)	Parametric Amplification of Metrics Fluctuations Through a Bouncing Phase
10:30 am	Coffee Break	
11:00 am	Savdeep Sethi (University of Chicago)	Some Thoughts on Time-Dependent String Theory
11:40 am	Sergei Khlebnikov (Purdue)	A Dual Description of Decoherence in de Sitter Space
12:20 am	Marco Peloso (CITA)	de Sitter Branes and the Gravi-Scalar Nature of the Radion
01:00pm -- 02:30 pm	Lunch Break	

Thursday Afternoon

Chair: K. Kadota

Theme: More Branes, Strings, and de Sitter Space-Time

Time	Speaker	Title
02:30 pm	Johannes Martin (University of Toronto/CITA)	Branedynamics
03:05 pm	Andrei Frolov (KIPAC/ITP, Stanford)	Can Inflating Braneworlds be Stabilized?
03:40 pm	Leonard Parker (UW Milwaukee)	Acceleration of the Universe from Heat Kernel Asymptotics
04:15 pm	Coffee Break	
04:45 pm	Richard Woodard (University of Florida)	Post-Inflationary Dynamics
05:30 pm	Discussion/TBA	
06:00 pm -- 07:00pm	Reception on Second Floor Overpass (Outside of Curia II)	

November 14

Friday Morning

Chair: E. Kolb

Theme: Back-reaction of Fluctuations

Time	Speaker	Title
09:10 am	Robert Brandenberger (Brown University)	Back-Reaction of Cosmological Perturbations on a Local Measure of the Expansion
09:50 am	Fabio Finelli (IASF/CNR)	Energy-Momentum Tensor of Cosmological Fluctuations in Massive Chaotic Inflation
10:30 am	Coffee Break	
11:00 am	Paul Anderson (Wake Forest University)	Linear Response Theory and the Validity of the Semiclassical Approximation
11:40 am	Emil Mottola (LANL)	Allowed States and Stress Tensor Fluctuations in de Sitter Space
12:20 pm	Erick Weinberg (Columbia)	New Bounce Solutions and Vacuum Tunneling in de Sitter Spacetime
01:00 pm -- 0:2:30 pm	Lunch Break	

Friday Afternoon

Chair: F. Finelli

Theme: Potpourri (strings, branes, back-reaction, and initial conditions)

Time	Speaker	Title
02:30 pm	Emil Martinec (University of Chicago)	Having the World on a String
03:10 pm	Atsushi Higuchi (University of York, UK)	Long-distance Behavior of the Graviton Propagator
03:45 pm	Tomislav Prokopec (University of Heidelberg)	Production of Massless Fermions during Inflation
04:20 pm	Coffee Break	
04:50 pm	Kenji Kadota (UC Berkeley)	A Resolution for Initial-Condition/Fine-tuning Problems in Modular Cosmology
05:25 pm	Patrick B. Greene (Fermilab)	Inflation and the Breadth of Our Baby Universe
06:00 pm	Discussion/TBA	
06:30 pm	Break for Day	

November 15

Saturday

Chair: C. Armendariz-Picon

Theme: Initial Conditions and Alpha-Vacua

Time	Speaker	Title
09:00 am	Katie Freese (U. Michigan at Ann Arbor)	What can WMAP tell us about the very early universe?
09:35 am	Eugene Lim (University of Chicago)	Constraints on Inflationary Vacuum Choices
10:10 am	Daniel Chung (UW Madison)	Theoretical Uncertainties of the Standard Inflationary Vacuum
10:45 am	David Lowe (Brown University)	Alpha_vac Perturbation Theory
11:20 am -- 11:50 am	Coffee Break	
11:50 am	Hael Collins (Carnegie Mellon University)	The Fate of the Alpha-Vacuum
12:25 pm	Matthew Martin (Carnegie Mellon University)	Vacuum Selection and the Enhancement of Inflaton Loops
01:00 pm	Stefan Hollands (University of Chicago)	Alpha-Vacua Ruled Out by General Covariance
01:35 pm	Rocky Kolb	Closing Remarks
01:45 pm	End of Workshop	